AIR WAR COLLEGE

AIR UNIVERSITY

CREATING THE ROYAL THAI AIR FORCE DOCTRINE PROCESS

by

Group Captain Nitaya Imanotai, RTAF

A Research Report Submitted to the Faculty
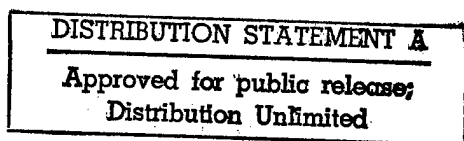
In Partial Fulfillment of the Curriculum Requirements

Advisor: Professor James Mowbray

Maxwell Air Force Base, Alabama

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Contents

Illustrations

Preface

The academic year I have spent at Air University has been both busy and rewarding. Because of the opportunity to be here, I have been able to fulfill a desire to do in-depth research about air power doctrine for the Royal Thai Air Force for the 21st Century. The important outcome of this paper is to suggest a means for creating a Royal Thai Air Force doctrine process. However, all work to date has just been preliminary. The real work will begin as the ideas explored in the paper are translated into application in the setting of the day-to-day operations of the Royal Thai Air Force.

No one person can take credit for success. Without the support of my husband, Vitnai Imanotai, who helped to bring our daughters to the United States for the year and who visited every chance to make sure we were all surviving here, this year would have been impossible. Our absence from home has caused him personal sacrifice, and for everything I thank him. Thanks go, as well, to Colonel Steve Havron, the Director of International Officer Affairs at Air War College, who made sure things were smoothly arranged and always came to our rescue.

Abstract

This research paper address air power doctrine, how it is made in various countries, and most importantly, how the doctrine process for the Royal Thai Air Force can be made more vital and responsive. It will form the basis for an ongoing development of a doctrine process for the Royal Thai Air Force for the 21st Century. The structure this paper follows is to examine the nature of doctrine, to compare how doctrine is developed in several modern air forces, and most importantly, to suggest a means for creating the Royal Thai Air Force doctrine process. The thesis of this paper, stated simply, is that the Royal Thai Air Force doctrine process needs to be formulated and documented; once the process is in place it must have an organizational structure which will keep it dynamic and responsive. Doctrine must never be allowed to stagnate and die. If the Royal Thai Air Force is to win in future wars, then we too need innovative doctrine. As technology changes, as people become better educated, as government policies change, as the threats to the nation shift and as national interests change, doctrine must evolve to ensure that the Royal Thai Air Force can meet the challenges of any future wars.

Chapter 1

Creating The Royal Thai Air Force Doctrine Process

Introduction

Each year the Royal Thai Air Force (RTAF) holds a competitive examination for a single quota to send a senior officer, usually of the rank of group captain, to the United States Air Force senior service school, the Air War College. Winning this competition confers a high honor upon the victor. At the same time, it also imposed an equally great responsibility. In 1996, for the very first time, a female officer sat for this prestigious competition. To the surprise of many, she was placed first among the nine group captains who sought the position.

After the first sense of elation over her victory wore off, her superiors called her back to reality by reminding her of the responsibility that goes with the honor. Looking at the most pressing long-term needs of the RTAF, they charged her to spend her year in the Air War College studying air power doctrine, how it is made in various countries, and, most importantly, how the doctrine process for the RTAF can be made more vital and responsive. Whenever an opportunity arose during the year and it was possible to steer in the direction of developing a doctrinal process for the RTAF, the author and her advisory committee sought to accommodate the wishes of the Thailand defense establishment

1

while meeting the academic requirements of the Air War College. This paper is the result. As such, it represents the end product of a year of intense study. It is by no means a perfect product. However, it will form the basis for an ongoing development of a doctrine process for the Royal Thai Air Force for the 21st Century.

The structure this paper follows is to examine the nature of doctrine, to compare how doctrine is developed in several modern air forces and, most importantly, to suggest a means for creating a RTAF doctrinal process. Many individuals have freely contributed to the research going into this paper. In addition to faculty and staff of the Air War College, numerous other individuals shared time and expertise in reading portions of the research in various stages of its preparation. Col Dennis M. Drew, the Vice Dean of the School of Advanced Air Power Studies, Professor James Mowbray, Air War College and Gregory L. Baker, International Officer School, deserve special commendation for graciously contributing their knowledge of how USAF doctrine is produced and suggesting several avenues to explore. Among the international officer classmates, a special thanks is due to Wg Cdr Mark Lax of the Royal Australian Air Force, who provided vital information and insight on doctrine in the Pacific.

The thesis of this paper, stated simply, is that a RTAF doctrinal process needs to be formulated and documented; once the process is in place it must have an organizational structure which will keep it dynamic and responsive. Doctrine must never be allowed to stagnate and die. In today's world environment, if even one factor changes, doctrine must change along with it. As technology changes, as people become better educated, as government policies change, as the threats to the nation shift and as national interests

change, doctrine must evolve to ensure that the RTAF can meet the challenges of any future war.

Chapter 2

The Nature Of Doctrine

At the very heart of war lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment and tactics. It is fundamental to sound judgment.

—General Curtis E. LeMay

As a starting point it is useful to examine the term "doctrine" and to try to understand the nature of doctrine. A good point to start, of course, is with a definition. This will be followed by consideration of the sources of doctrine, the types of doctrine, and the application of doctrine. Lastly, we will look at why it is important and what that doctrine should be.

Definition

The word "doctrine" is used in many ways in many different countries. However, the meaning is fairly constant. For instance, in the United States, Joint Pub 1-02 Department of Defense Dictionary of Military and Associated Terms defines doctrine as: "fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application."[1]

Air Force Manual (AFM) 1-1 stresses the importance of "doctrine," emphasizing that doctrine is a standard against which to measure our efforts. It describes our understanding of the best way to do the job—the world as it should be. Many factors can prevent us from acting in the best manner, but doctrine can guide our effort, gauge our success, and illuminate our problem.[2]

In Australia, the Royal Australian Air Force (RAAF) states of "doctrine" that doctrine is a set of principles only; organizational and employment means still have to be established. Directives help establish the organizational means;

> Procedures help establish the employment means. These directives and procedures however lack the time—enduring hallmark of doctrine. They most certainly are guided by doctrinal principles, but are also affected by political and technological issues which can be quite transitory.[3]

In the United Kingdom, the Royal Air Force (RAF) believes that doctrine is, in essence, "that which is taught." It is an accumulation of knowledge which is gained primarily from the study and analysis of experience. As such it reflects what works best.[4]

Many have attempted to refine the common definition of doctrine. For example, military doctrine has been defined as:

> A compilation of principles and policies...that represent the best available thought and indicate and guide but do not bind in practice.[5]

> or

> Fundamental principles by which the military forces...guide their actions in support of national objectives. It is authoritative but requires judgment in application.[6]

> and

> Military doctrine is what is officially believed and taught about the best way to conduct military affairs.[7]

Colonel Dennis M. Drew defines "doctrine" in a different manner which is significant for several reasons. In "Of Trees and Leaves," he writes that a new vein of doctrine, that first using the word "best" denotes military doctrine's importance to the successful conduct of military operations. Second, the term "military affairs" implies that doctrinal concepts are not limited to battlefield engagements with an enemy. A broader concept of military doctrine is particularly important during an era in which the development and deployment of forces rivals the importance of the employment of those forces. Third, the word "taught" suggests an important function of military doctrine, which will be discussed later, and the word "believed" directly suggests the interpretation and thus transmutable nature of military doctrine.[8]

Application of Doctrine

As this definition indicates, doctrine is for guidance of the best way to do the job. It is an educational tool that teaches airman what we have to learn, and the best way to do it is to set the standard or goal. This application is essential to modify doctrine by applying the lessons learned. Doctrine may need changing to allow for new technology, for different conditions, or for refined objectives. New applications and results might marginalize or revitalize old concepts.

Sources of Doctrine

Doctrine is taken from three areas, theory, technology, and historical experience. Theory, in the guise of far-reaching conceptual thinking, is most necessary but is nevertheless hypothetical, innovating from the vision of theorists. Vision alone is not enough, it does not provide sufficient substance. The second source is technology that

has at times taken its cue from doctrine, but there have been many technological breakthroughs that occurred for reasons other than doctrine, and doctrine must be flexible enough to accept such changes. The final area is historical experience which provides the real substance about what has and has not worked in the past.[9]

History can reveal the repeated success or failure of certain actions. The primary source of beliefs about how "best" to conduct military affairs is the experience of how things were conducted in the past. In other words, the primary source of military doctrine is military history[10] because almost perfectly the whole idea of doctrine is something based on objective assessment of recorded experience.[11]

Col Dennis M. Drew and Dr. Donald Snow argue that not all past experience is relevant to the present, and there is no guarantee that what is relevant today will remain relevant in the future. The doctrine is not merely the result of experience. Experience by itself has limited utility. As Frederick the Great pointed out, if experience were all important, he had several pack mules who had seen enough of war to be field marshals. The real key is the accurate analysis and interpretation of history or experience[12].

Types of Doctrine

There are three types of doctrine. Each type has its own unique characteristics and functions, can be taken together, and also integrated as a whole. The first is fundamental (or basic) doctrine which consists of beliefs about the purposes of the military, the nature of war, the relationship of military force to other power instruments of power, and similar subject matter on which less abstract beliefs are founded. The second is environmental doctrine. Environmental doctrine is a compilation of beliefs about the employment of

military forces within a particular operating medium. It is significantly influenced by such factors as geography and technology. Sea power doctrine, for example, is obviously influenced by geography and by technology. Air power doctrine on the other hand is less influenced by geography but depends totally on technology for its very existence. The final type of doctrine is organizational doctrine which is best defined as basic beliefs about the operation of a particular military organization. It attempts to bring the abstractions of fundamental and environmental doctrine into sharper focus by leavening them with current political realities, capabilities, and cultural values. The organizational doctrine concerns the use of a particular force in a particular environment at a particular time[13]. Basic, operational and tactical doctrine are treated extensively in AFM 1-1, Vol. 2. Condensing their discussion, one might say the following: basic doctrine establishes fundamental principles describing and guiding proper use of aerospace forces in war. Basic doctrine . . . provides broad enduring guidance which should be used when deciding how Air Forces should be organized, trained, equipped, employed, and sustained. Basic doctrine is the cornerstone and provides the framework from which the Air Force develops operational and tactical doctrine (274). Operational doctrine is at the operational level of war and is concerned with activities which link tactics and strategy by establishing operational objectives, sequencing events to achieve operational objectives, initiating actions, and applying resources to bring about and sustain these events (296). Tactical doctrine establishes detailed tactics, techniques, and procedures that guide the use of specific weapons systems to accomplish specific objectives. Tactical doctrine presents guidance for how specific aerospace forces should be employed in engagements and battles (305).

Why Doctrine is Important

General Ronald R. Fogleman, USAF Chief of Staff, explains why doctrine is important. He contends each service's doctrine springs from its fundamental beliefs about warfare formed through experience and expertise in certain technologies and mediums of warfare. Doctrine has the potential to contribute to the accomplishment of the mission, to achieve the warfighters' objective. The doctrine can be useful in intellectual debates, and it can provide a valid input for future force programming, but its primary purpose should be to guide warfighting and military operations other than war. Doctrine may support "why" we have certain weapon platforms, but its real value is in providing people a coherent frame work for employing air power as a team. Doctrine is necessary and important because every improvement in air power's capabilities and usefulness increases the importance of doctrine. The greater the combined capabilities of modern joint forces, the more important our doctrine becomes.[14]

What Doctrine Should Be

Doctrine writer Carl H. Builder, would design forces and doctrine for speed, stealth, destructiveness, payload, and range. Doctrine emphasizes surprise, initiative, freedom of action, mass, shock, and the principles of war. The new equipment and doctrine should be an effective "means" for nailing the smoking gun—"ways for immediately engaging and suppressing heavy weapons fire. The current equipment and doctrine are designed for attacking artillery in mass, wherever and whenever it is detected and with little concern for collateral damage, and also the current equipment and doctrine are designed to attack aircraft wherever they are on the ground and in the air.[15]

Even though doctrine is necessary and important, one of the dangers about doctrine is that if you let your doctrine stagnate by not updating it, you will be behind your adversaries. We have to be aware of the critical need for updating our doctrine.

Perhaps the most ubiquitous doctrine problem is the tendency to let doctrine stagnate. Changing circumstances must be constantly evaluated because they can modify beliefs about the important lessons of experience. If current and projected circumstances do not affect the analysis of history's lessons, doctrine rapidly becomes irrelevant[16]. The systematic intellectual process for the development of Air Force doctrine is the best way to update doctrine. As General I.B. Holley remarks in his doctrinal process:

> The best way is to arrive at sound generalizations about tactics and technique. From extended study, it appears that there are three essential elements in this doctrinal process. These may be described as the collection phase, the formulation phase and the dissemination phase, each of which merits close scrutiny[17].

Notes

[1] Joint Pub 1-02, "Department of Defense Dictionary of Military and Associated Terms," Washington DC, Government Printing Office, 28 March 1994, p 121

[2] "Air Force Manual 1-1, Vol. I Basic Aerospace Doctrine of United States Air Force," Government Printing Office, March 1992, p 4.

[3] "Regional Air Power Workshop, Darwin, 24 to 26 August 1993," Royal Australian Air Force, Air Power Studies Center, Commonwealth of Australia, 1993, p 49

[4] "Air Power," Royal Air Force, AP3000, United Kingdom, July 1993, p 4.

[5] R.F. Futrell, "Ideas, Concepts, Doctrine: A History of Basic Thinking in The United States Air Force 1907-1964," Maxwell AFB AL, 1977, p 3

[6] Lt Gen J.W. Pauley, "The Thread of Doctrine," Air University Review, May-Jun 1976, Maxwell AFB AL, 1976, p 3.

[7] The Author owes the idea for this most useful definition to Professor S.B. Holley, Jr., Duke University. In addition to presentations of this concept by Professor Holley at Air University, he presented similar concepts in the 1974 Harmon Memorial Lecture at the Air Force Academy.

[8] "Air Force Manual 1-1, Vol. I Basic Aerospace Doctrine of United States Air Force," Government Printing Office, March 1992, p 40

[9] Regional Air Power Workshop Darwin 24 to 26 August 1993," Royal Australian Air Force, Air Power Studies Center, Commonwealth of Australia, 1993, p 44

Notes

[10] Col Dennis M. Drew, "Of Trees and Leaves: A New View of Doctrine," Air University Review, Jan-Feb 1982, Maxwell AFB AL, 1982, p 40.

[11] Maj Gen I. B. Holley, "The Doctrine Process: Some Suggested Steps," Military Review, April 1979, Department of the Army, 1979, p 12.

[12] Col Dennis M. Drew and Dr. Donald Snow, "Making Strategy: An Introduction to National Security Process and Procedures," Air University Press, Maxwell AFB AL, August 1988, p 164.

[13] Ibid., p 170. Also Air Force Manual 1-1, Vol. II, Basic Aerospace Doctrine of the United States Air Force, March 1992, US Government Printing Office defines these concepts, pp. 274, 296 & 305

[14] . Gen Ronald Fogleman, "More Than Just a Theory," Air War College, Department of Strategy, Doctrine and Air Power, Reader: Volume I, Academic Year 1997, Air University, Maxwell AFB AL, August 1996, p 45.

[15] Carl H. Builder, "Doctrinal Frontiers," Air Power Journal, Winter 1995, Air University Press, Air University, Maxwell AFB AL, 1995, p 11.

[16] Col Dennis M. Drew and Dr. Donald Snow, "Making Strategy: An Introduction to National Security Process and Procedures," Air University Press, Maxwell AFB AL, August 1988, p 164.

[17] Maj Gen I.B. Holley, "The Doctrine Process: Some Suggested Step," Military Review, April 1979, Department of the Army, 1979, p 5.

Chapter 3

The Doctrine Process

Those who are possessed of a definitive body of doctrine and deeply rooted convictions based upon it, will be in a much better position to deal with the shifts and surprises of daily affairs, than those who are merely taking short views, and indulging their national impulses as they are evoked by what they send from day to day.

—Sir Winston Spencer Churchill

Purpose

The purpose of any air doctrine development process is to effect review and modification of air power doctrine because changing factors continually require reshaping doctrine. Generally, doctrine will change only slowly, but there will be refinement in developing a commonality of interpretation. Over time, the interpretation of doctrine can change. A doctrine process allows changes in doctrine to be managed in an orderly way so that, while air power doctrine is responsive to appropriate influences, the guidance process is stable. Written doctrine is not the end product of the doctrine process, but one of the steps in a continuing, dynamic process. It is a starting point for other activities such as education which, without a dynamic doctrine process, would become dogma.[1]

The Doctrine Process

The practical consideration must be that the doctrine is recorded in order that a body of central beliefs be accurately reflected and correctly perceived. The right perspective is

an integral part of the revision and refinement that makes doctrine a dynamic process. Recording and refining the collective memory of central beliefs enforces a discipline and clarity of thought that help maintain the dynamic process of doctrine.[2]

There are models of doctrine process in several countries and most of the model expand from a three-phase effort in developing doctrine. The first phase is assembling the objective information required from a wide variety of sources. The second phase is the formulation phase during which the doctrinal generalizations are developed. The final phase is dissemination[3]. This is true with the doctrinal process of the Royal Air Force (RAF), the Royal New Zealand Air Force (RNZAF), and the "typical" doctrine process developed by Professor Dennis M. Drew from the USAF's School of Advanced Air Power Studies at Air University.

The Doctrine Process of the RAF

Doctrine development is a continuous process involving a circular methodology. A range of inputs needs to be considered and processed into the various levels of doctrine. That doctrine provides the guidelines within which actual military capabilities are created. These capabilities are then listed through exercise or conflict experience and using the feedback from the results of these lists, the doctrinal inputs are adjusted and the existing doctrine can be refined. This is known as the doctrinal process and can be expressed graphically as shown in Figure 1.

Doctrine Inputs

The following inputs are needed to formulate coherent strategic, operational, and tactical doctrines:

Military Objectives. The armed forces exist to support policy and coherent national or multi-national goals. What Armed Forces are expected to achieve in support of policy is fundamental to their effective employment.

The Threat. The capabilities of potential enemies are a major factor in shaping force structure and determining the best ways to conduct military operations. Identifying and quantifying the nature of the threat helps to ensure that the Armed Forces are matched to the tasks.

Policy. In undemocratic societies, the political leadership exercises an overriding input into doctrine. This input is related to military objectives but, in addition, considers the political process, budget considerations and priorities. The policies formulated by government decide both the size and direction of military effort. These policies are major inputs to doctrine process.

Historical Experience. The study of past conflicts is a fundamental tool in doctrine formulation. Learning the lessons of the past helps to ensure that past mistakes are not repeated.

Capabilities. A nation's military capabilities are affected by its natural resources, manpower, industrial base, level of technological advancement and level of expenditure for defense.

Theory. Over the years, military theorists such as Clausewitz, Jomini, Douhet, and Liddell Hart, have examined military art and have developed theories about the best way to employ force.

Doctrine Outputs

Once formulated, doctrine is translated into actual military capabilities through plans, organization, force structure and training requirements.

Plans. Plans are the most specific output of doctrine and determine to a large extent all the other outputs.

Organization. The organization of an armed force should be designed to implement its doctrine and is usually set out in charts and diagrams.

Force Structure. Doctrine shapes operational planning at all levels and operational plans shape the force structure required to carry them out. Force structure is a lengthy process, and the existing force structure at any particular time will have an impact on doctrine.

Training Requirement. Experience has proven the validity of the adage "train the way you intend to fight and then fight the way you have trained."

Validation

Validation is the last element in the doctrine cycle. Validation ensures that our doctrine is sound and avoids producing inappropriate organizations and force structure[4] This is known as the doctrine process and can be expressed in Figure 1 graphically as follows:

```
                        ➡  Doctrine        ➡
                           Strategic
┌─────────────────┐       Operational       ┌──────────────────┐
│    INPUTS       │       Tactical          │    OUTPUTS       │
│ National Interest│                         │  Organization    │
│ National Military│                         │ Force Structure  │
│   Objectives    │     ┌──────────────┐    │    Training      │
│ Perceived Threat│     │              │    │  Requirements    │
│ Politics/Policies│    │  FEEDBACK    │    │     Plans        │
│    Theory       │  ◀──│  Experience  │◀── │                  │
│    History      │     │ Current Combat│    │                  │
│  Capabilities   │     │Training Results│   │                  │
└─────────────────┘     └──────────────┘    └──────────────────┘
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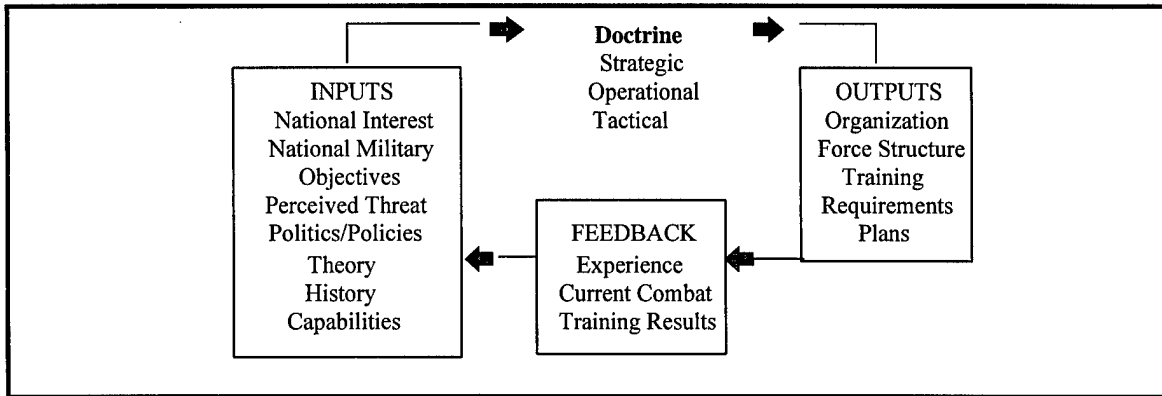**Figure 1. The Doctrine Process**

The Doctrine Process of the RNZAF

Group Captain Kelvin Crofsky, Assistant Air Commander Operations, RNZAF Air Command, presented the RNZAF doctrine development model which requires a continuous structure to advance the principles and to make sure that they will be applied and continuously developed. The structure includes steps laid out as a circle as shown in Figure 2:
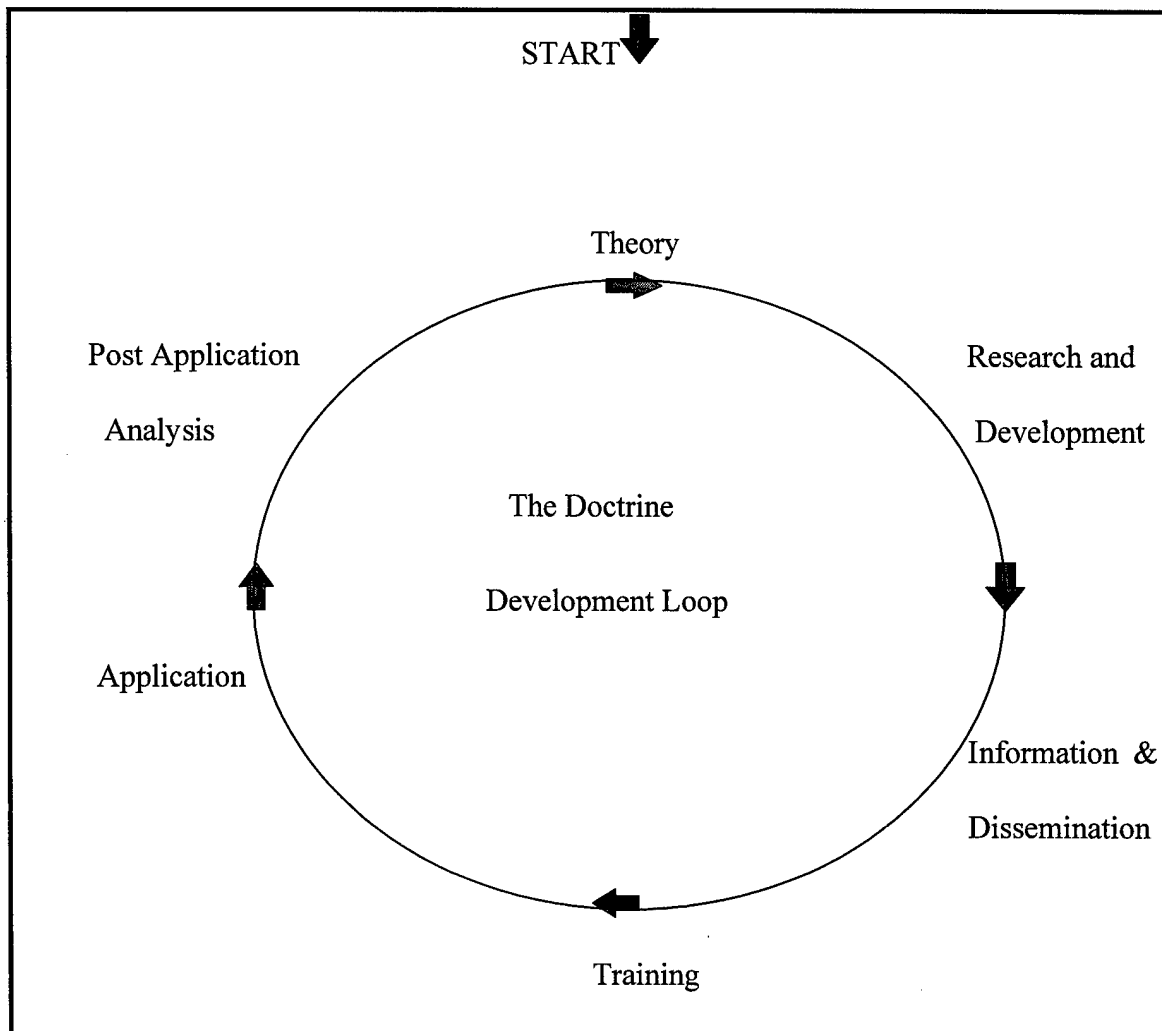
START

Theory

Post Application
Analysis

Research and
Development

The Doctrine

Development Loop

Application

Information &
Dissemination

Training

Figure 2. The Doctrine Development Loop

Group Captain Kelvin Crofsky, states the steps of the loop starting with theory and follows with research and development, information dissemination, application and post application analysis. Below is the explanation of those steps[5]

Theory is the first step of the development loop that emphasizes the knowledge and experience link to the technology because:

> doctrine cannot stand still; the combined influence of new knowledge new technology, and innovative ideas refine the maxims and also has a far-reaching effect in air power doctrine.

Research and Development. This step takes the theory from the first step and focuses it by research into the measurable results; and then develops the process into useable form.

Information Dissemination and Collection. This step is to make sure that on the receiving end, practitioners, must be open to this information and ensure that they are knowledgeable regarding new doctrine and techniques "giving information through international forums, workshops, and visits." Within the RNZAF, operational level headquarters staff have clear direction to practice an air power orientation in their staff duties.

Training. The RNZAF obtains practical in-house and overseas training through visits and conferences, training courses, short term exchange postings, and a comprehensive exercise program.

Application. This fifth activity establishes the validity of the doctrine, using validity rather than truth and the RNZAF is accustomed to using air power doctrine. This occurs during force development and provides the rigor to quantify and prioritize capability requirements and equipment enhancements.

Post Application Analysis. To complete the doctrine development loop, post application analysis is essential to modify doctrine by applying the lessons learned. Doctrine may need changing to allow for new technology, for different conditions, or for refined objectives. New applications and results might marginalize or revitalize old concepts.

The last model of the doctrine process is provided from the "doctrine process" of Colonel Dennis M. Drew, who is a Professor and Associate Dean at the School of

Advanced Airpower Studies, Air University, Maxwell AFB AL. Previous positions included director of the Airpower Research Institute at Air University. He presents a typical "doctrine process" model as shown in Figure 3[6]

```
┌────────────────────────────────────────────────────────────────────┐
│  Experience          Consolidate          Develop concept           │
│  Theory              and                  (Thesis/antithesis)        │
│  Technology   ⇨      analyze      ⇨                                  │
│                                                                      │
│       ⇧                                        ⇩                     │
│  ┌─────────┐                          ┌──────────────────────┐       │
│  │  Apply  │                          │ Test / Evaluate      │       │
│  │         │                          │ Discuss/Argue/Debate │       │
│  └─────────┘                          └──────────────────────┘       │
│       ⇧                                        ⇩                     │
│  ┌─────────┐      ┌───────────────┐   ┌──────────────────────┐       │
│  │ Educate │      │    Write      │   │   Accept             │       │
│  │  the    │  ⇦   │    and        │⇦  │   Reject             │       │
│  │  force  │      │ publish doctrine│  │   Synthesis          │       │
│  └─────────┘      └───────────────┘   └──────────────────────┘       │
└────────────────────────────────────────────────────────────────────┘
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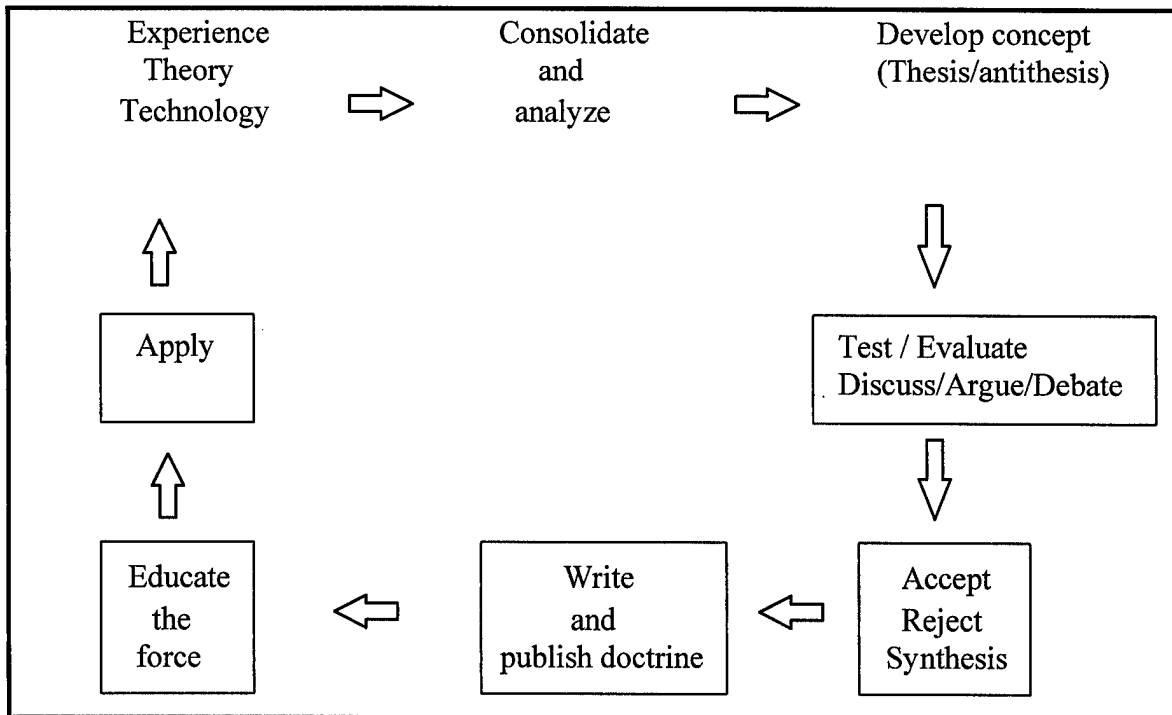
Figure 3. The Colonel Drew Development Cycle

Drew explains the thesis of each step of his doctrine process clearly and precisely. He starts with experience, theory, and technology and then gathers the required data. From there, one analyzes the data, develops the concept, evaluates the answers or the concepts, and identifies the best concept, then writes and publishes the research report. Educating the force, applying and putting the results to the first step of the process ensure that the process of the doctrine is effective and efficient.

Comparing the Three Doctrine Processes of the Three Nations

From the research on these three doctrine processes of the three nations air forces of , RAF, RNZAF, and the "doctrine process" which is presented by Colonel Dennis M.

Drew, USAF, it is obvious that the main points of these processes are similar. They have principal steps which articulate similar concepts, such as starting with the theory, experience, and technology and followed by the gathering of data for analysis, developing the concepts from the analysis, then testing and evaluating the concept to be accepted. These preceding steps flow into the final step, which is to write down, publish, and educate the military force. The application of this doctrine might result in success or failure. The success or failure of the application is the input for the first step in beginning the process over again. This ensures doctrine does not stagnate, remains fresh and innovative, thus helping achieve the mission and objectives effectively and efficiently.

Notes

[1] "The Air Power Manual," Royal Australian Air Force, AAP1000, Air Power Studies Centre, Commonwealth of Australia, 1990, p 255.

[2] Ibid., p 263.

[3] Maj Gen I.B. Holley, "The Doctrine Process: Some Suggested Step," Military Review, April 1979, Department of the Army, 1979, p 5.

[4] "Air Power," Royal Air Force, AP3000, United Kingdom, July 1993, p128-131.

[5] "Regional Air Power Workshop Townsville 4 to 8 Sept 1995," Royal Australian Air Force, Air Power Studies Centre, Commonwealth of Australia, 1995, p 113-114

[6] Col Dennis M. Drew, "Inventing a Doctrine Process," Airpower Journal, Winter 1995, Air University Press, Air University, Maxwell AFB AL, 1995, p44.

Chapter 4

Creating The RTAF Doctrine Process

It is probable that new interpretations will continue to be needed if Air Force doctrine is to be responsive to changing national policy requirements, the potential military threat, and developments in military technology.

—General Curtis E. LeMay

The RTAF Doctrine Process

In the second section of this paper, the doctrine process of three nations were compared, and it was discovered that one must begin developing doctrine by just developing a process that is feasible. The following steps are recommended as being highly desirable to be the RTAF doctrine process:

Gathering information. The first step of the process is collecting and collating information from multiple sources, paying particular attention to experience, theory and technology. From experience, theory, and technology come the impetus to change or update the doctrine development process.

Analyzing Data. The second step of the process is analysis of the data, corroborating facts and validating them, thereby, making reasonably sure that the information is usable for continuing the process.

Developing Ideas and Forming Hypotheses. The third step of the process is developing the ideas from the analysis and forming those ideas into hypotheses which can then be tasked and evaluated.

Testing Ideas. The fourth step of the process is the actual testing of a hypotheses in light of both accuracy and workability.

Evaluating Results. The fifth step of the process is assessing the outcome of the testing with an eye to accepting, rejecting, or modifying those which successfully made the screening thus far.

Adopting. The sixth step of the process is incorporating the accepted or modified hypothesis into a set of coherent propositions and publishing these as doctrine.

Educating the Force. The seventh step of the process is educating the force on the published doctrine and ensuring that the doctrine permeates throughout the entire system.

Application of Doctrine. The final step of the process, inevitably, is the application of the doctrine in a real-world setting to achieve the RTAF mission and attendant objectives.

The outcome of the application of the doctrine becomes the input which feeds back into the loop at the lead of the first step, where it become known as experience and is subject to the sort of analysis that will ensure that errors in application will not be repeated and cause the revised doctrine to fail again. The RTAF process is shown in Figure 4.
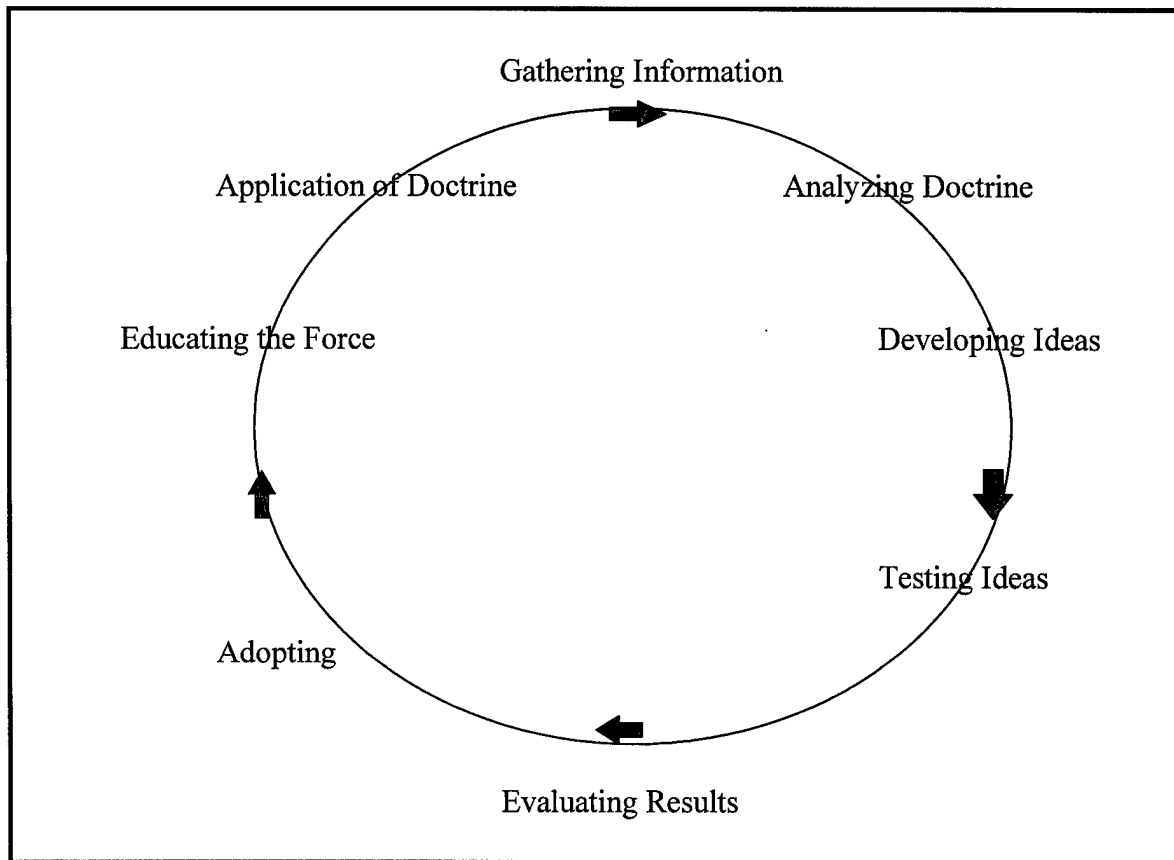
Figure 4. The Doctrine Development Loop

In order for a doctrine process to become an institutional part of the RTAF, it is important for organizations to be established with the mission of implementation of the above steps. This next part describes the RTAF organization and its elements and for which doctrine process steps the elements are responsible.

Organizations Involved in the RTAF Doctrine Process

The major organizations involved in the RTAF doctrine development are shown in Figure 5.
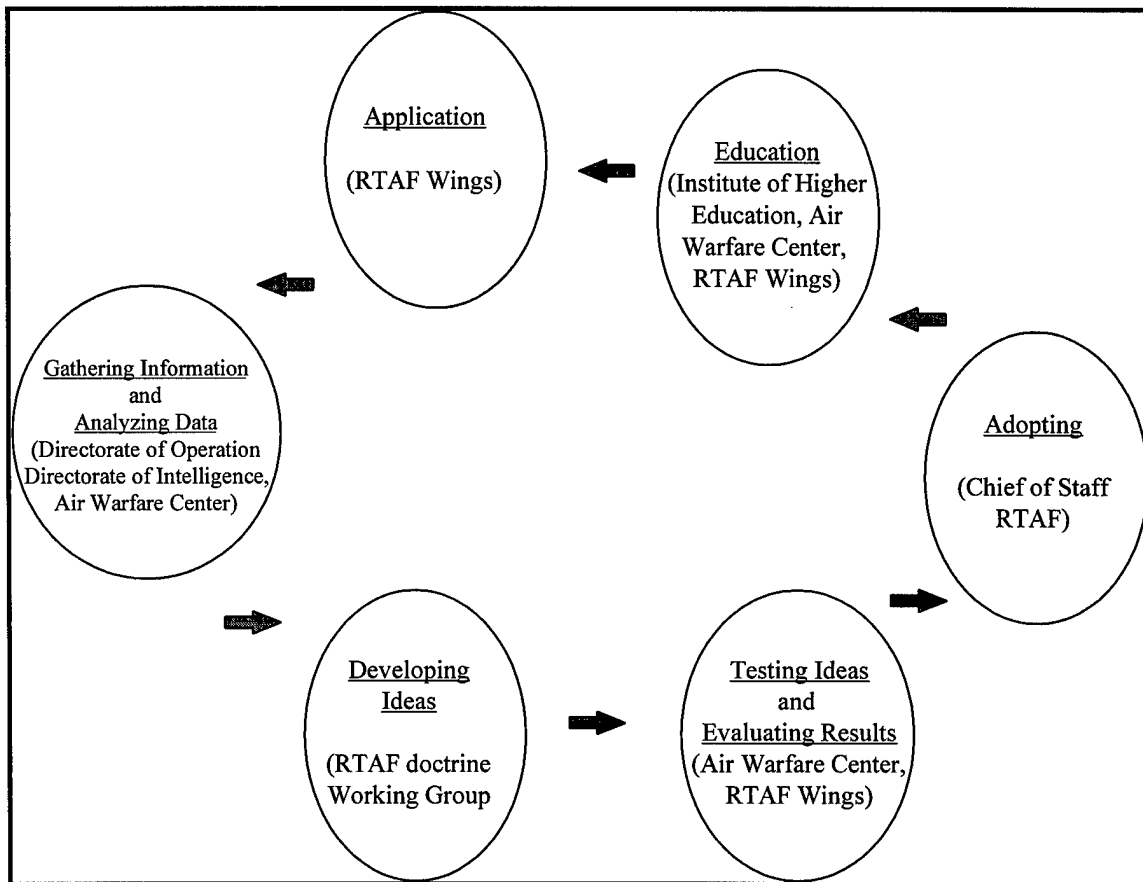
Figure 5. RTAF Doctrine Organizations

Gathering Information and Analyzing Data

It is important to have a central command responsible to control and manage the doctrine development process. For the RTAF, this should be the Air Warfare Center on behalf of the Air Combat Command because of its mission to do this. In addition, there are sufficient resources to do so here. Specifically, while the responsibility for gathering information should reside within the Air Warfare Center, analyzing data should be the responsibility of the Directorate of Operations and Directorate of Intelligence because both of these organizations have responsibility for gathering the military history and the strategic information. These are the principal offices for coordinating doctrine development.

Developing Ideas/Forming Hypotheses

For developing ideas and hypotheses, it is recommended the RTAF adopt an idea based on an organization in the RAAF called the Air Power Doctrine Board. This board consists of senior command representatives from Air Force organizations that approve doctrine for the RAAF[1]

For the RTAF, then, an Air Power Doctrine Board should be established consisting of commanders of the Institution of Higher Education, Air Warfare Center, and Wing Commands and Headquarters of the RTAF, and the Directorate of Operations.

To assist the Board in accomplishing this function, an Air Power Doctrine Working Party, consisting of staff representatives from the Board would have day-to-day responsibility for coordinating and monitoring staff work for the senior Board members.

Testing Ideas and Evaluating Results

The testing ideas and evaluating of doctrine are critical steps and should be responsibilities which are spread throughout the RTAF. The principal organization for managing the testing and evaluating of doctrine should remain with the Air Warfare Center as stated in their mission. However, all RTAF wings test and evaluate doctrine daily; it is not merely a formal process. For example, on exercises, wargames or simulators, new doctrine procedures should be tested and evaluated.

The Air Warfare Center needs to develop test and evaluate procedures that incorporate doctrine evaluation criteria in exercises, wargames, and simulators. Additionally, the need to test and evaluate doctrine is not limited to fighter aircraft. The Air Warfare Center doctrine development organization should be expanded to include, for example, airlift and air reconnaissance.

Adopting the Doctrine

The adoption and approval of doctrine for the RTAF should be the sole responsibility of the Chief of Staff. Mission success or failure depends on implementation of sound doctrine. This is the most critical step and requires the attention of the RTAF's most senior officers.

Educating the Forces

Educating the forces in doctrine should be a shared responsibility involving the Institute of Higher Education, the Air Warfare Center and RTAF wing commanders.

The Institute of Higher Education should be primarily responsible for the teaching of basic, fundamental doctrine. However, because of the close relationship between basic and operational doctrine, the Institute of Higher Education must also educate the force on principles of operational doctrine.

The principal responsibility for educating the force on operational doctrine employment should rest with the Air Warfare Center. The translation of operational doctrine into tactical doctrine should be the responsibility of the Air Warfare Center and wing commanders as in the model on the following page.
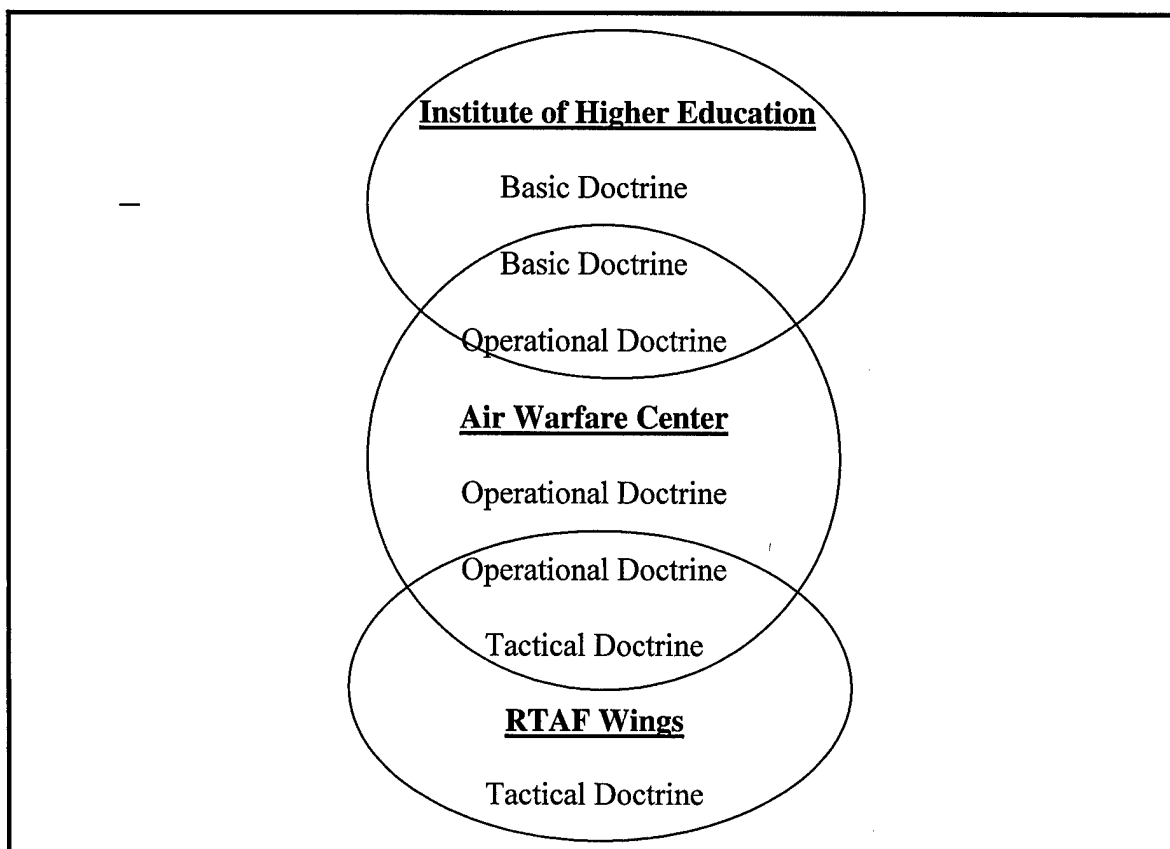
Figure 6. Educating the Force

Applying the Doctrine

Once approved by the Chief of Staff, it is the responsibility of wing or squadron commanders to apply the doctrine. The people that will make doctrine work for mission success are in the tactical units of the RTAF. As wings and squadrons note problems with doctrine, it is very important that open lines of communication exist between the wings, Air Warfare Center, and Air Power Doctrine Board so that problems can be identified or new ideas can be presented for consideration.

It is at this point that the doctrine cycle begins again, thus ensuring that it does not stagnate or fall behind new ideas or improved technology. Applying doctrine entails two

important elements: 1) Programs to build the force structure our doctrine requires and 2) War plans that use the doctrine we have established.

The Schedule for Implementation

A very important part of implementation that needs to be addressed is a schedule; this paper does suggest a possible schedule for implementation by using the example of schedule for Basic Doctrine. However, in order to make sure that their process will be reality, it is suggested the Headquarters of the RTAF develop and direct the specific milestones. This schedule should address the creation of both the doctrine organizations (such as the Air Power Doctrine Board) as well as, the doctrine document for development. Additionally, schedules should be considered for the best and evaluation of these items also.

Example of the Schedule for Basic Doctrine

The RTAF basic doctrine development cycle is illustrated in Figure 7. This will be discussed below.
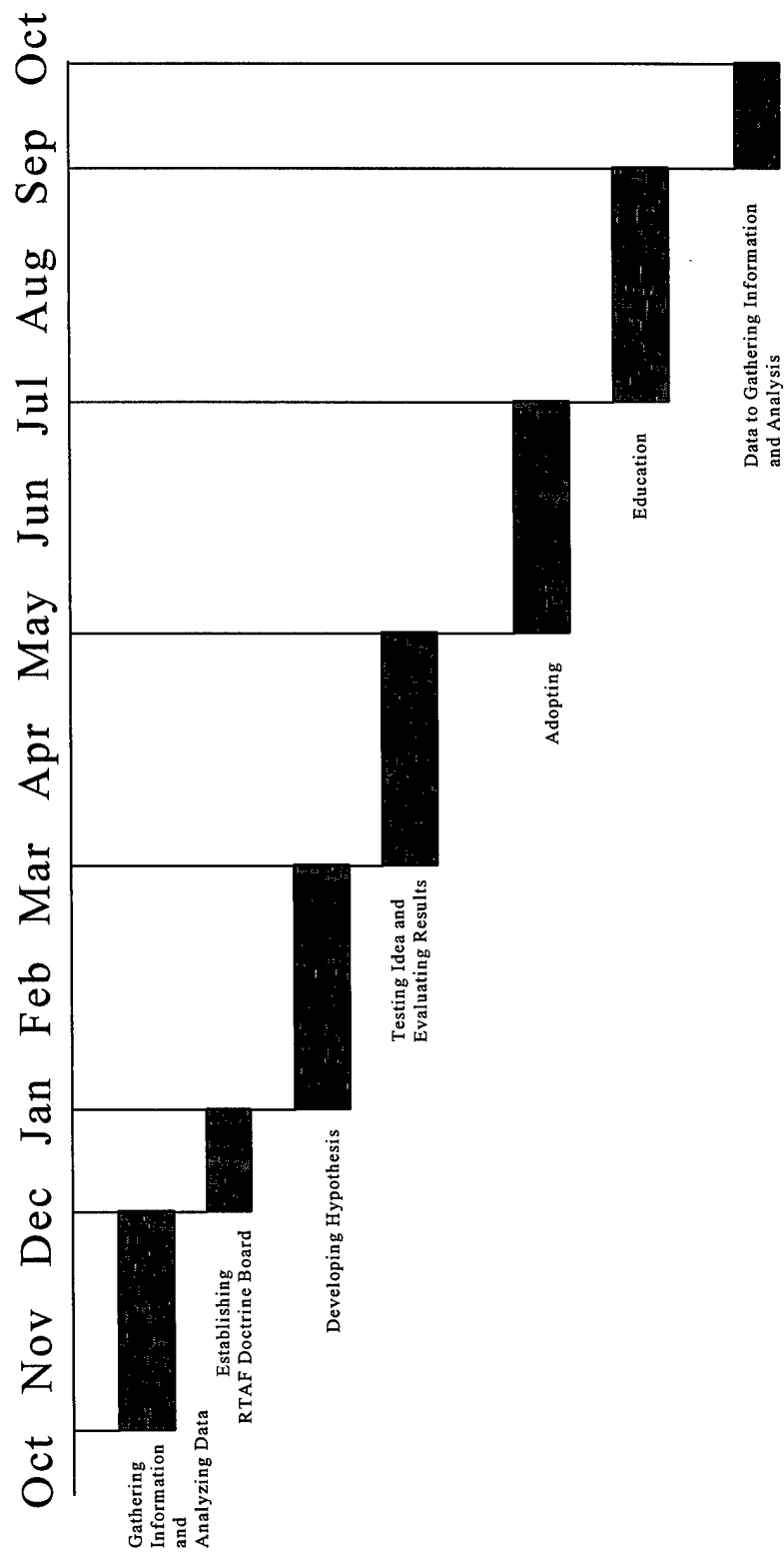
Figure 7. Example Schedule for Basic Doctrine

29

Gathering Information and Analyzing Data

Because of their missions, the Directorate of Operations and Directorate of Intelligence should have the responsibility for gathering information and the Air Warfare Center should analyze the data because they have sufficient resources to do so. The data will be input to the RTAF Doctrine Board.

Establish RTAF Doctrine Board

The Commander in Chief of the RTAF will select the appropriate senior officers from the Institute of Higher Education, Air Warfare Center, Wing Commanders and Headquarters of RTAF, Directorate of Operation to develop hypotheses.

Developing the Hypotheses

The RTAF Doctrine Board will accomplish this function. The staff representatives from the Board would have a day-to-day responsibility for coordinating and monitoring staff work for the senior members.

Testing Ideas and Evaluating Results

This step should be spread throughout the RTAF by checklists and exercises, and the Air Warfare Center will develop the results of the testing and evaluating and distribute the final results for adoption.

Educating the Forces

This step should be the responsibility of the Institute of Higher Education, the Air Warfare Center, and RTAF Wing Commanders. The War College students of the Institute of Higher Education should spend 10 months in school, and in the short term

combat officers in the RAir Warfare Center and the RTAF Wing Commanders should spend two months in a course of instruction.

Applying the Doctrine

The RTAF Wing or Squadron commanders will apply the doctrine and identify new ideas can be represented for consideration. It is at this point that the doctrine cycle begins again and ensures that the doctrine will be updated on a continuing basis.

Notes

[1]"The Air Power Manual," Royal Australian Air Force, AAP1000, Air Power Studies Centre, Commonwealth of Australia, 1990, p 255.

Chapter 5

Conclusion

This paper has described the nature of doctrine and has addressed the definition of doctrine, the sources of doctrine, why doctrine is important, and what doctrine should be. It has compared the doctrine processes developed in several modern air forces and suggests a means for creating a RTAF doctrine process in which there are eight steps. Developing a RTAF doctrine process, the management organization of the doctrine process, in an appropriate time will ensure that the RTAF will not stagnate and behind its adversaries. This paper has recommended a doctrine process and organization for the RTAF. However, a very important part of the implementation that needs to be addressed is a schedule. This paper also suggests a possible schedule for that implementation.

In teaching the art of war, Marshal Ferdinand Foch laid great emphasis upon doctrine or mental discipline, which consists first in a common way of objectively approaching the subject and; second, in a common way of handling it, by adapting without reservation the means to the goal aimed at. Then doctrine should ensure that although each one will solve the problem in his own fashion, these thousand solutions, will all be directed to a common objective.[1]

The aim of this paper has been to meet the objective set for the author by the RTAF, to ensure that RTAF doctrine will be updated with a sound process and by an

organization which shares responsibility to develop doctrine, to provide all Air Force

personnel a basis for understanding the employment of air forces, in peace and in war,

and to serve as a background for the preparation of succeeding operational doctrine

manuals that will cover the tactics and techniques of employing air forces.[2]

Notes

1 R.F. Futrell, "Ideas, Concepts, Doctrine: A History or Basic Thinking in the United States Air Force 1907-1964," Maxwell AFB AL, 1972, p 2.
2 .Ibid., p 3.

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